

Practical Stata: Basics and Beyond

Lecturer: Michele Slocovich

Language

English

Course Description and Objectives

Stata is a statistical software package widely adopted in a scholar and research environment. The aim of this introductory course is to make participants confident with the basic Stata usage for analyzing business and economic data, since in many courses basic Stata topics will be taken for granted. The course is designed for students who have little or no experience with Stata and intend to develop the knowledge of this useful software for business and economics data analysis.

An overview of the main Stata functions will be provided as well as the application of these functions with real examples.

The course has four main objectives:

- To demonstrate the potentialities of the software for analyzing data by making use of different examples
- To enable students to handle data by importing it and cleaning it for analysis
- To enable them to carry out basic statistical analyses on their own
- To give pointers for further skills development

Upon successful completion of this course, the student will be enabled to:

- Import and manipulate data for purpose of analysis
- Produce descriptive analyses by means of simple statistical tables, measures and graphs
- Estimate a linear regression model
- Export regression results into report-ready tables
- Automate repetitive tasks with basic STATA programming
- Set up and estimate basic panel-data models

Every session will intermix the presentation of syllabus topics followed by examples and in class exercises.

Important notice: The course presents the software Stata with its main features; therefore, it does not represent whatsoever a substitute of a formal statistics course. Statistical and econometric methods are not taught in this course: where a technique is used, the relevant concepts are only pointed to.

Every session will intermix the presentation of syllabus topics followed by examples and in class exercises.

Audience

The course is open to all Bocconi students. In particular:

- Those who will be involved in projects requiring the analysis of a dataset
- Students who will need Stata to prepare their final thesis work
- Students taking, or planning to take, econometrics courses.

Prerequisites

To feel comfortable in this course, students should be familiar with basic statistical concepts (i.e. frequency distribution, average, standard deviation, probability, bivariate descriptive statistics ...) as taught in a first level statistical course (e.g. 30001 Statistics).

Basic computer knowledge is given as acquired (i.e. file manager use, basic knowledge of Excel ...) – having attended 30424 CS would be ideal.

Guidelines

Registration:

You can sign up for the course only through the yoU@B student Diary, in the "**sign-up for various activities**" box (please note that the box appears only when registrations open. Before then it will not be visible).

You can only cancel your registration by Diary **no later** than the registration deadline for the course itself. No other ways of cancellation are allowed.

Registration will be confirmed a few days before the start of the course through a message posted in the yoU@B student Diary.

Attendance:

- Attendance of **75% or more** of class hours: obtainment of the **Open Badge**

- Attendance of **less than 25%** of class hours: **Exclusion List**

Duration

16 hours

Teaching mode

The course will be taught exclusively **in person**. Distance learning will not be available.

Calendar

Lecture	Date	Time	Room
1	Tue 03/11/2026	18.15 - 19.45	12 (Sarfatti)
2	Wed 04/11/2026	18.15 - 19.45	12 (Sarfatti)
3	Mon 09/11/2026	18.15 - 19.45	12 (Sarfatti)
4	Tue 10/11/2026	18.15 - 19.45	12 (Sarfatti)
5	Tue 17/11/2026	18.15 - 19.45	12 (Sarfatti)
6	Wed 18/11/2026	18.15 - 19.45	12 (Sarfatti)
7	Mon 23/11/2026	18.15 - 19.45	12 (Sarfatti)
8	Tue 24/11/2026	18.15 - 19.45	12 (Sarfatti)

Please note: lessons will be held in the traditional room and **all the students have to bring their own device, with Stata installed and working before Lesson 1.**

Syllabus of the course

Lesson Topics

1 Introduction to Stata

- Stata environment overview
- Finding help: resources
- Dataset basics: variables, edit, browse, list
- Stata commands structure
- Do-files and log files: reproducible workflow

Lesson	Topics
2	Data management and preparation - Qualifiers for data partitioning - Preparing data for analysis, manipulation & labelling - Importing data from another software
3	Manipulating and Exploring Data - Basic descriptive uni- and bi-variate statistics - Frequency tables - Managing formats, recoding - Combining data files - Generating new variables
4	Missing Data - Handling "missing values" - Variable types Data Visualization - Core graphs: histogram, scatter, box plot - Saving, exporting, modifying graphs - Observation Weights
5	Hypothesis testing & Simple Linear Model - Tools for hypothesis testing - Simple and multiple OLS: regress command - Factor variables and interaction - Values prediction & Post Estimation
6	Linear Model Advanced - Variables transformations - Instrumental variables - Exporting results tables - Train/test split for prediction
7	Beyond simple regression - Representing date/time values - Time series overview, lags/differences - Panel data: setup, fixed vs random effects
8	Programming with Stata - Programming with Stata: concepts - Programming with Stata: macros, loops, conditionals, returned results. - Pinters: python integration in Stata - Self-assessment

Suggested Bibliography

- Hamilton L. C., *Statistics with STATA: Version 12, 8th Edition*, Cengage, 2013
- Bittmann F., *STATA, a really short introduction*, De Gruyter Oldenbourg, 2019
- Acock A. C., *A Gentle Introduction to Stata*, Stata Press

Software

Stata version 18 or 19 (although version 14 onwards is enough to attend: differences among these versions are not relevant to course contents).

Available seats

This activity is limited to **110 participants**.

Registration will close once this limit has been reached or when the registration period ends, whichever comes first.

Please note that you may **withdraw** from an ITEC course **only before** the **registration deadline**.